

District of Columbia  
Intended Use Plan for  
Safe Drinking Water Act Funds  
Federal Fiscal Year 2005

The Safe Drinking Water Act (SDWA) Amendments of 1996 (Public Law 104-182) authorize the establishment of a Drinking Water State Revolving Fund (DWSRF) program to assist public water systems to finance improvements needed to achieve or maintain compliance with SDWA requirements and to protect public health. Although the District of Columbia (the "District") is defined as a State for the purposes of SDWA, Section 1452(j) exempts the District from establishing a State Revolving Fund program. Therefore, the U.S. Environmental Protection Agency (EPA) provides the District's allotment of Federal funds in the form of grants. The District of Columbia Water and Sewer Authority (WASA) is the grantee for project grants while the District of Columbia Department of Health (DOH) and its agent, the U.S. Army Corps of Engineers Office (the "Corps") at Blue Plains, can receive funds for project oversight and management.

EPA, DOH, and WASA have agreed to this Fiscal Year (FY) 2005 Intended Use Plan (IUP). This IUP outlines how the combined amount of Federal funding and required matching funds will be apportioned among program and project uses.

### **SHORT- AND LONG-TERM GOALS FOR USE OF DC GRANT FUNDS**

#### **Long-Term Goals**

1. Provide safe and adequate supplies of potable water by correcting problems with and maintaining adequate facilities for drinking water storage and distribution. Emphasis is placed on projects designed to eliminate potential threats to public health.
2. Achieve and maintain compliance with SDWA drinking water standards or other requirements of the SDWA.
3. Continue the six-year WASA Lead Service Line Replacement Program.
4. Continue compliance with EPA Administrative Order for Compliance on Consent Docket No. SDWA-03-2004-0259DS and SDWA-03-2005-0025DS.

#### **Short-Term Goals**

1. Continue with lead service replacements per the Lead and Copper Rule (LCR). For the monitoring periods ending in 2002, 2003, and 2004, more than 10% of the lead sampling test results in the WASA system exceeded the Lead Action Level. Based on current sampling results, more than 10% of the lead sampling test results may exceed the Lead Action Level in 2005. Consequently, Federal regulations require the replacement of 7% of Lead Services each year as long as WASA exceeds the Lead Action Level per the LCR.

2. Continue to work with the Washington Aqueduct Division of the Army Corps of Engineers and EPA to determine the cause of the increased lead levels at the tap and the solution. Cooperate with all parties to implement the recommended solutions.
3. Develop a long-term plan for improvements in WASA drinking water infrastructure. This plan will guide the selection of projects that ensure protection of public health and compliance with SDWA drinking water standards. WASA has completed development of a water system facility plan and master plan, which identify the long-term continuing needs in this area.
4. Continue a long-term WASA Lead Service Line Replacement Program.
5. Continue compliance with EPA Administrative Order for Compliance on Consent Docket No. SDWA-03-2004-0259DS and SDWA-03-2005-0025DS.

### **AVAILABLE FUNDS**

The FY 2005 DWSRF allotment to the District is approximately \$8,303,100. In addition to this amount, approximately \$1,993,078 is available from the deobligation of surplus Federal funds from previously completed projects. Therefore, the total amount of Federal funds available to the District is \$10,296,178.

### **USE AND DISTRIBUTION OF FUNDS**

For 2005, the available funding and expected usage is as follows:

Available Federal Funds	Dollars
Carryover of Deobligated Grant Funds	\$1,993,078
FY 2005 DWSRF (allotment)	\$8,303,100
TOTAL	\$10,296,178
Use of Available Federal Grant Funds	
DOH Project Oversight and Program Management	\$756,144
Grants for Capital Projects	\$9,540,034
TOTAL	\$10,296,178
Fund Sources for Capital Projects	
Federal Funds (80% of Eligible Project Costs)	\$9,540,034
WASA Funds (20% of Eligible Project Costs)	\$2,385,008
TOTAL	\$11,925,042

From the \$10,296,178 available to the District, a grant for \$756,144 has been made to DOH for project oversight and program management and the use of the Corps for certain tasks. That grant will pay for oversight and management of all active District drinking water grants through September 2007. The remaining balance of \$9,540,034 is available to fund capital projects. The

funding displayed in the above table may be revised as estimated costs become final.

Section 1452(e) of SDWA requires States to provide a match of 20%. Although the District is not establishing a DWSRF, it is appropriate for the drinking water system owner to participate in the cost of facility improvements. WASA will therefore provide a 20% match based on the eligible cost of each grant project.

### **LIST OF PROJECTS**

EPA developed a Project Priority Rating System in 1999 in conjunction with DOH and WASA. The Project Priority Rating System numerically scores drinking water projects based upon their contribution to protecting public health, improving compliance with regulatory standards, maintaining drinking water reliability and safety and protecting the environment. Numerical ratings from the Project Priority Rating System are used to rank the projects. The ranking system includes a by-passing provision that allows for the funding of lower ranked projects in the event of emergencies or if higher ranked projects are not ready to proceed.

The Project Priority List (PPL) is updated yearly to remove projects when grants are awarded, update estimated costs and schedules based upon current information, and include new projects. The FY2005 PPL revises the FY2004 PPL and identifies expected projects to be funded during the FY2005 – FY2010 period. Projects are displayed on the PPL in priority order. The project with the highest priority rating score (i.e., the most important) is listed first. The remaining projects are listed in order of descending score. However, it should be noted that although some projects are given a different ranking number on the PPL table they may have the same priority ranking score. It is expected that projects on the FY2005 PPL will be funded in priority order with exceptions only as allowed for in the Project Priority Ranking System.

The following PPL-listed projects are expected to be ready for funding during FY2005 with the \$9,540,034 in Federal funds that are available for award. Grant applications for these projects will be submitted soon.

<u>ID Number</u>	<u>Ranking</u>	<u>Project Description</u>	<u>Federal Award</u>	<u>Grant Submittal Date</u>
FS-993817-05	1	Lead Service Line Replacements 2005-3	\$3,681,227	1/2005
FS-993817-04	2	Lead Service Line Replacements 2005-2	\$5,891,308	1/2005
FS-993817-06	3	Lead Service Line Replacements 2005-4	\$3,600,000 (estimate)	2/2005
		TOTAL:	\$13,172,535 *	

\* Not to exceed \$9,540,034

Concerning the apparent shortfall in funding to fund all the projects listed on this FY 2005 IUP, WASA will provide the monies to complete these projects and/or funds from next year's appropriations could be used to supplement the shortfall balance. Also, WASA is currently funding the design of several of the highly ranked projects and, when the designs are complete, these projects will become candidates for future Intended Use Plans.

As noted previously, for the monitoring periods ending in 2002, 2003, and 2004, more than 10% of the lead sampling test results exceeded the Lead Action Level and, based on the current sampling results, more than 10% of the lead sampling test results may exceed the Lead Action Level in 2005. Federal regulations require the replacement of 7% of lead service lines each year as long as WASA exceeds the Lead Action Level per the LCR.

WASA has committed to go beyond what is called for by the LCR by exceeding the 7% a year requirement and by replacing all of the known lead service line pipes that are in public space by the end of FY 2010 as demonstrated in the table below. After FY 2004, it is estimated that approximately 20,200 known lead service lines remain in the WASA system. In July 2004, the WASA Board of Directors approved the following six-year lead service line replacement program:

#### **WASA's Six-Year Lead Service Line Replacement Program**

<b>FY</b>	<b>Replacements</b>
2005	2,500
2006	3,600
2007	3,600
2008	3,600
2009	3,600
2010	3,300

If more lead service lines become known to WASA, it will replace them as discovered or in the subsequent years.

#### **Methodology of Lead Service Line Replacements**

In general the selection criteria for the lead service line replacement addresses is as follows:

1. Create comprehensive maps using Geographic Information System (GIS) technology to show the following information:
  - Lead Sampling Test Results:
    - Less than or equal to 15 ppb.
    - Greater than 15 ppb and less than or equal to 100 ppb.
    - Greater than 100 ppb and less than or equal to 200 ppb.
    - Greater than 200 ppb.
  - Identify addresses that have submitted "at risk" forms to WASA with water test results.

- Identify addresses already replaced or scheduled for replacement under existing lead service replacement contracts.
  - Identify other water and sewer projects that will include lead service replacements.
  - Identify suspended or “moratorium” streets. Moratorium streets are recently paved roadways that are suspended from excavation for five years after they are paved unless a waiver is issued by the District of Columbia Department of Transportation (DDOT). This coordination prevents cutting of newly paved roads in accordance with Title 24 DCMR Chapter 34. These moratorium streets will be routinely updated and mapped.
  - Coordinate the lead service line replacement work with planned DDOT projects
  - Use census data to show blocks with greater percentages of children under six years of age.
2. Eliminate addresses on moratorium streets or noted as prior/future replacements.
  3. Review the remaining information and select addresses based on street segments with the highest number of potential lead service replacements that:
    - Have high second draw test results.
    - Include the “at risk” population as can be accommodated and still maintain the whole block concept.
    - Use the census data from District of Columbia Department of Planning to help with the ranking; e.g. if two blocks have similar test numbers and similar numbers of lead services, select the block with the highest density of under six years of age.
    - Reflect extensive coordination with DDOT to minimize disruption and cost by insuring that all selected blocks would have final paving done by DDOT after lead service replacement.

From October 1, 2004 to September 30, 2006, WASA included in this program priority lead service replacements for at least 1,000 locations that have been found to have high lead concentrations and/or the presence of a high risk permanent resident in the house such as pregnant and/or nursing women or children under the age of six. These priority replacements will be determined based upon the following criteria developed by WASA with concurrence of the DOH and EPA.

1. Replace lead services that serve customers who have children under six years of age with elevated blood lead levels (10 ug/dl or greater).
2. With assistance from DOH, identify and replace lead services that serve daycare centers.
3. Replace lead services that serve “at risk” addresses with priority given to the highest lead water test results.

These lead service line replacement projects will replace lead service lines within public space and offer the property owner the option to replace the lead service line on private property at WASA’s cost. The line replacement on private property, while encouraged, is voluntary.

To maintain an aggressive schedule for lead service replacement construction contracts, WASA has proceeded with bidding FY 2005 projects as follows:

**Schedule for FY 2005 Lead Service Line Replacement Contracts**

<b>Project</b>	<b>Advertise Date</b>	<b>Bid Open Date</b>	<b>Execute Date</b>	<b>Notice to Proceed</b>
Lead Service Line Replacements 2005-1 *	08/15/04	09/15/04	10/27/04	12/3/04
Lead Service Line Replacements 2005-2	08/22/04	09/22/04	10/28/04	12/3/04
Lead Service Line Replacements 2005-3	08/29/04	09/29/04	11/18/04	12/3/04
Lead Service Line Replacements 2005-4	1/16/05 **	2/16/05 **	4/2005 **	5/2005 **

\* *This project received Federal grant funding in FY 2004*

\*\* *Proposed Milestone Dates Scheduled*

It should be noted that while both Lead Service Line Replacements 2005-2 and Lead Service Line Replacements 2005-3 Projects either are or will soon be under construction, the final decision to provide Federal funding will only be made following the public input to this document. Nevertheless, WASA has decided to begin work on these projects now, realizing that it will pay for this work in entirety should Federal funding approval not be given in the future.

There are several other drinking water projects listed on the PPL which are scheduled to be undertaken this year in conjunction with the lead service line replacement projects. Since all of the Federal grant funds have been targeted to be used in the lead service line replacement projects, these other projects will be undertaken and funded exclusively with WASA funds.